

Microsoft Excel 2010- Illustrated

Unit D: Working with Charts

Objectives

- Plan a chart
- Create a chart
- Move and resize a chart
- Change the chart design

Objectives

- Change the chart layout
- Format a chart
- Annotate and draw on a chart
- Create a pie chart

Planning a Chart

- Chart planning guidelines
 - Determine the purpose of the chart
 - Identify the data relationships you want to communicate graphically
 - Determine results you want to see
 - Decide which chart type is most appropriate

Planning a Chart

- Chart planning guidelines
 - Identify the worksheet data you want the chart to illustrate
 - Understand the elements of a chart

Planning a Chart

- Chart elements
 - The horizontal axis (x-axis) is also called the **category axis**
 - The vertical axis (y-axis) is also called the **value axis**
 - The “z-axis” is present in **3-D charts**

Planning a Chart

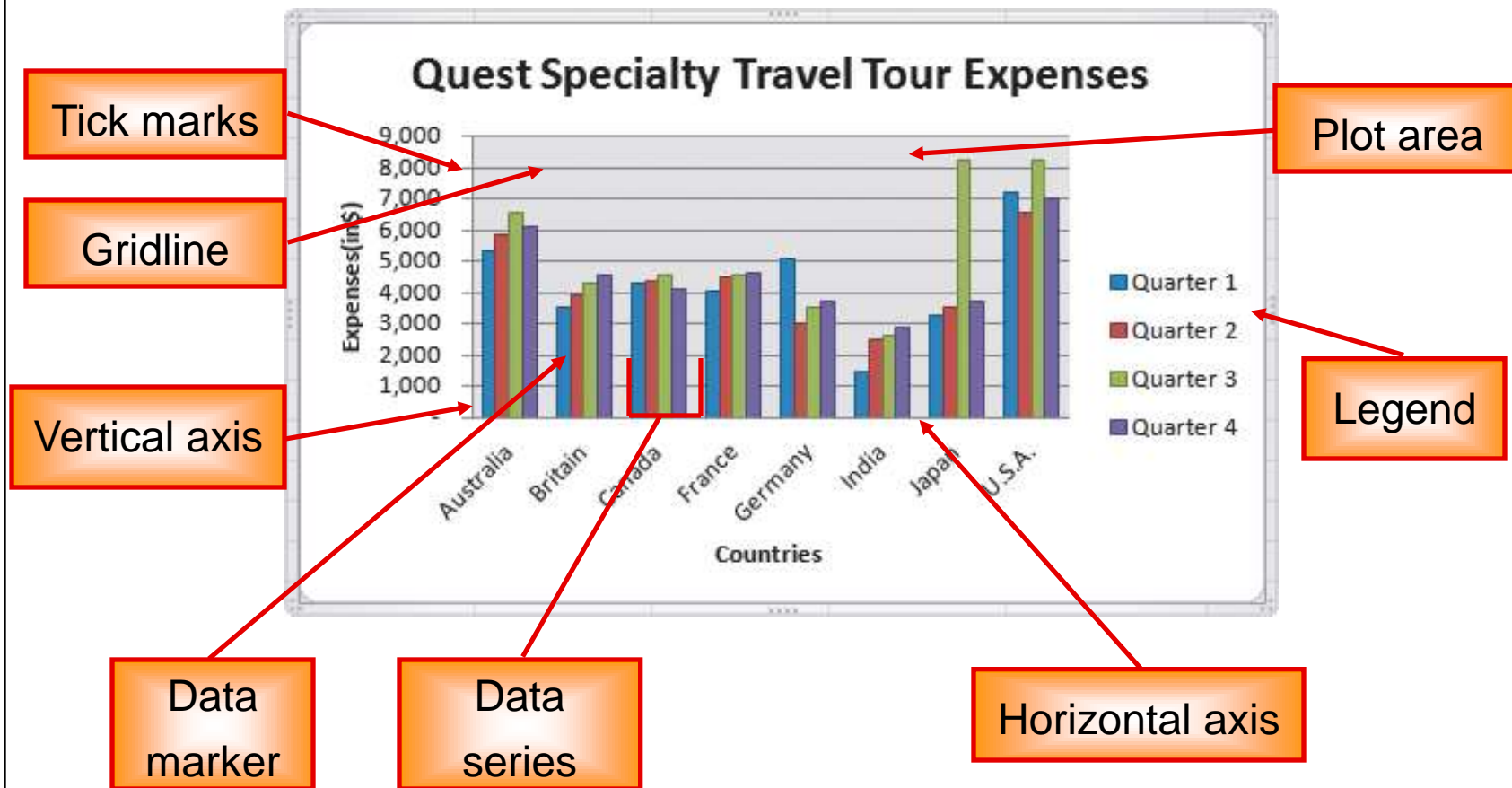
- Chart elements
 - Area inside the horizontal and vertical axes is called the **plot area**
 - The scale of measure on the y-axis is identified by **tick marks**
 - A **legend** makes it easy to identify each data series

Planning a Chart

- Chart elements (cont.)
 - A **data point** is the value in a cell you select for your chart
 - A **data marker** visually represents each data point in the chart
 - A group of related data points is a **data series**







Planning a Chart

Chart elements



Planning a Chart

Common chart types

type	button	description
Column		Compares distinct object levels using a vertical format; the Excel default; sometimes referred to as a bar chart in other spreadsheet programs
Line		Compares trends over even time intervals; looks similar to an area chart, but does not emphasize total
Pie		Compares sizes of pieces as part of a whole; used for a single series of numbers
Bar		Compares distinct object levels using a horizontal format; sometimes referred to as a horizontal bar chart in other spreadsheet programs
Area		Shows how individual volume changes over time in relation to total volume
Scatter		Compares trends over uneven time or measurement intervals; used in scientific and engineering disciplines for trend spotting and extrapolation

Creating a Chart

- To create a chart:
 - Select a **range** of data
 - Use buttons on the Insert tab of the Ribbon to create and modify a chart

Creating a Chart

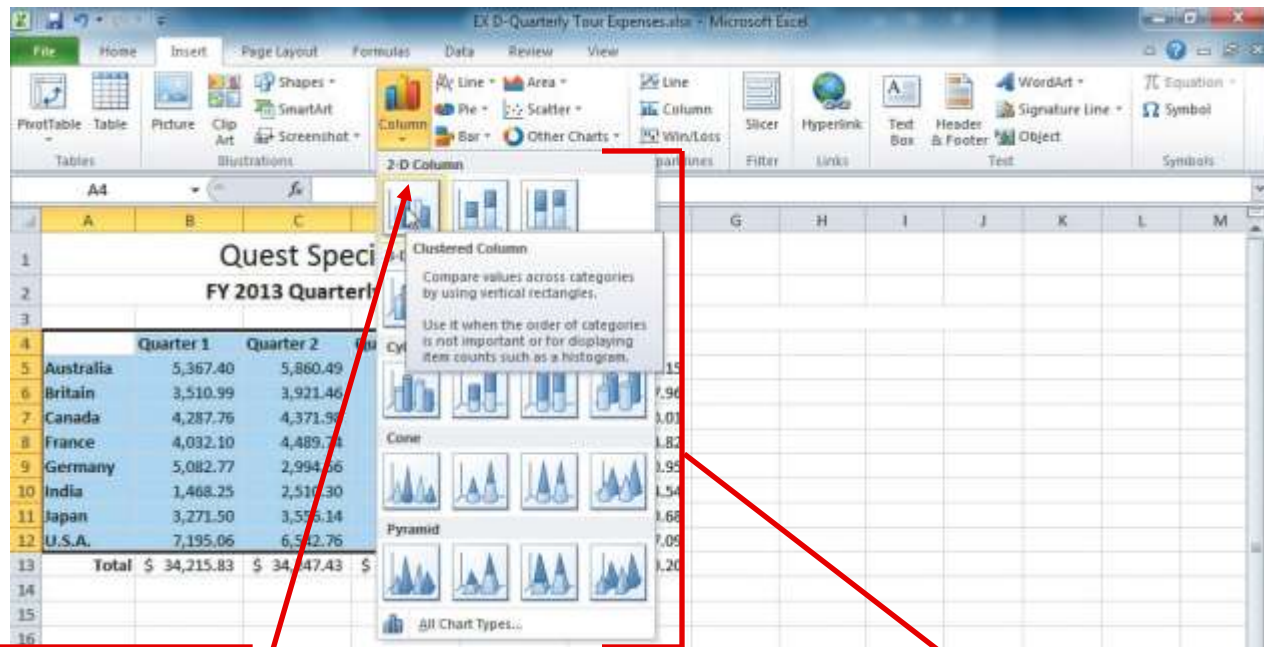
- **Sizing handles**, the small series of dots at the corners and sides of the chart's border, indicate that the chart is selected

Creating a Chart

- An **embedded** chart is one that is inserted directly in the current worksheet
- A **chart sheet** is a sheet in a workbook that contains only a chart, which is linked to the workbook data

Creating a Chart

Column chart gallery



Clustered
Column
chart type

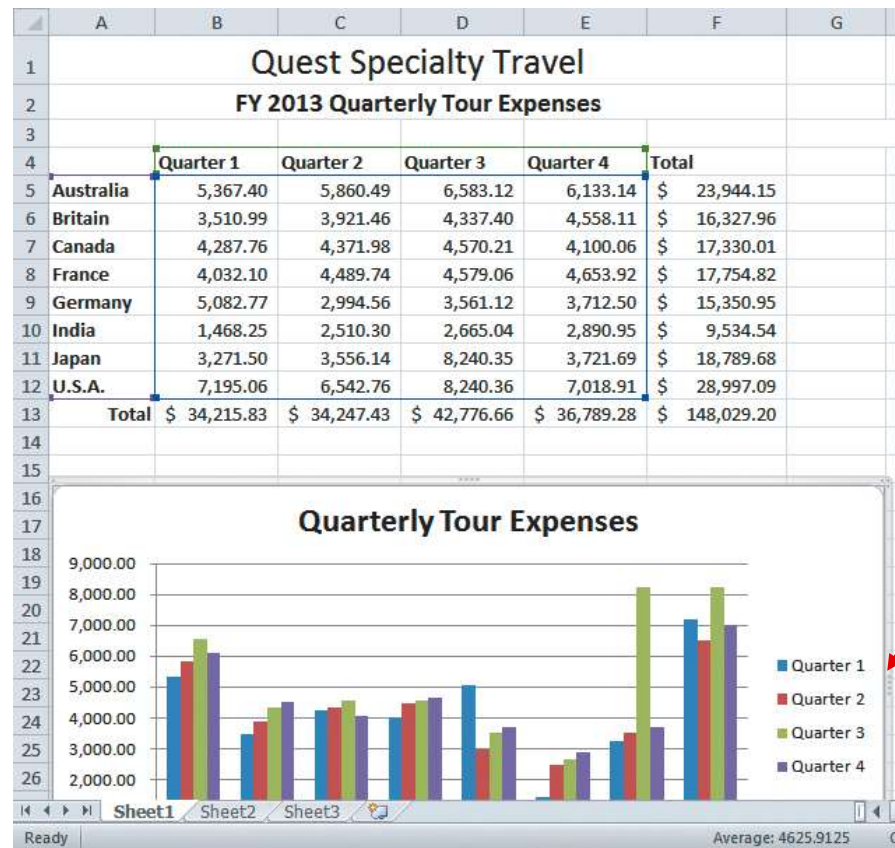
Column chart
types

Moving and Resizing a Chart

- An **object** is an independent element on a worksheet
 - Moving a chart object does not affect formulas or data
 - Resize a chart by dragging its sizing handles;
 - Move a chart by dragging the chart itself

Moving and Resizing a Chart

Moved and resized chart



Changing the Chart Design

- Changing data values in the worksheet automatically updates the chart
- **Chart Tools** tabs can be used to make specific changes in a chart

Changing the Chart Design

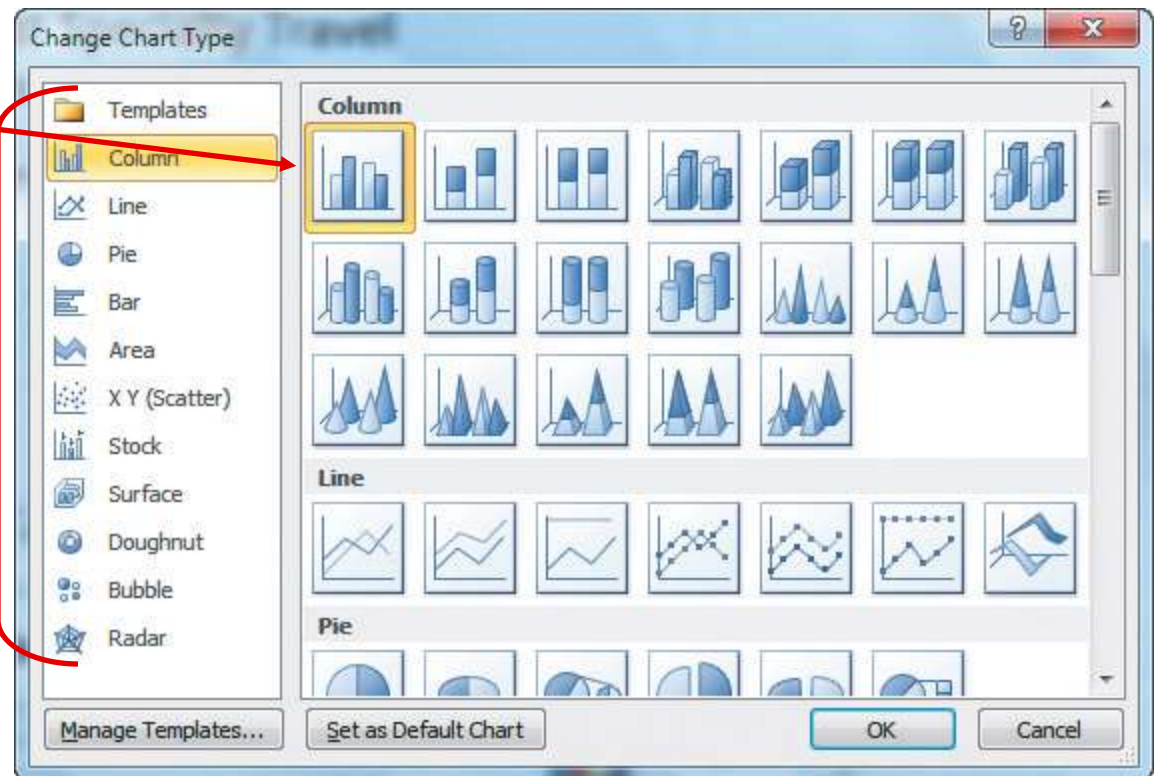
- Using the Chart Tools Design tab, you can:
 - Change the chart type
 - Modify the data range and configuration
 - Change the layout of objects
 - Choose from coordinating color schemes
 - Move the location of the chart

Changing the Chart Design

Change Chart Type dialog box

Currently
selected chart
type

Chart type
categories



Changing the Chart Layout

- **Chart Tools Layout** tab makes it easy to create and modify individual chart objects
- Using the Chart Tools Layout tab, you can:
 - Add shapes and text to a chart
 - Add and modify labels
 - Change the display of axes

Changing the Chart Layout

- Using the Chart Tools Layout tab, you can (cont.):
 - Modify the fill behind the plot area
 - Eliminate or change the look of gridlines
 - Create titles for the horizontal and vertical axes
 - Add graphics or background color

Changing the Chart Layout

Axes titles added to chart

Vertical axis title

Chart title

Horizontal axis labels

Vertical axis labels

Horizontal axis title



Formatting a Chart

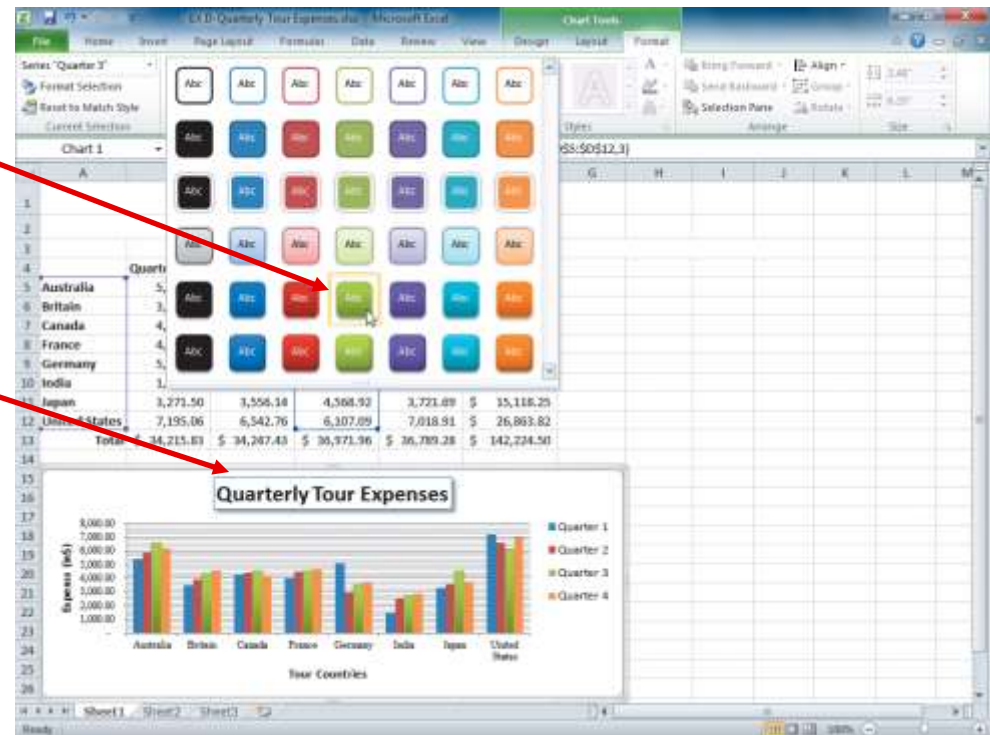
- **Chart Tools Format** tab can be used to make formatting enhancements
 - Change colors in a specific data series
 - Apply a style to a series using the Shape Styles group
 - WordArt, which lets you create curved or stylized text, can be created using the WordArt Styles group

Formatting a Chart

Live Preview of new style applied to data series

Style hovered over

Live Preview of
hovered style

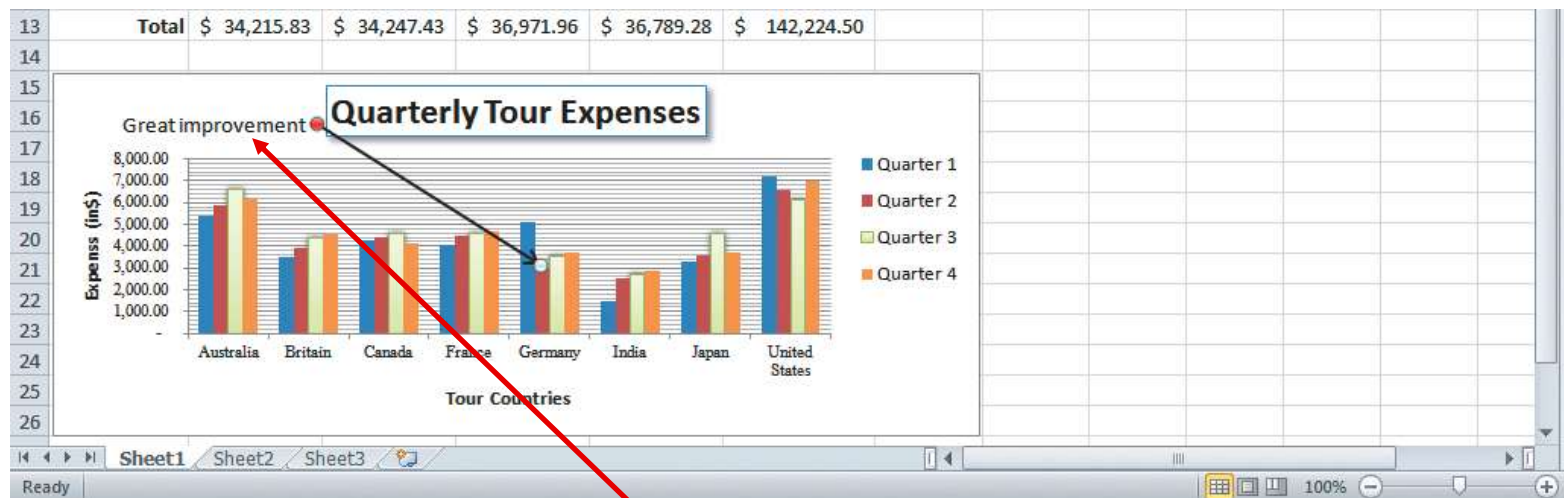


Annotating and Drawing on a Chart

- A **text annotation** is a label that you add to a chart to further describe data
- You can add shapes such as arrows and boxes to a chart
 - Lines and arrows can be used to point out exact locations you want to emphasize

Annotating and Drawing on a Chart

Text annotation and arrow shape add to chart



Text annotation

Create a Pie Chart

- You can create multiple charts based on the same worksheet data
 - Different chart types can be better at emphasizing different parts of the data
- In a pie chart, emphasize a data point by **exploding**, or pulling that slice away from the pie chart

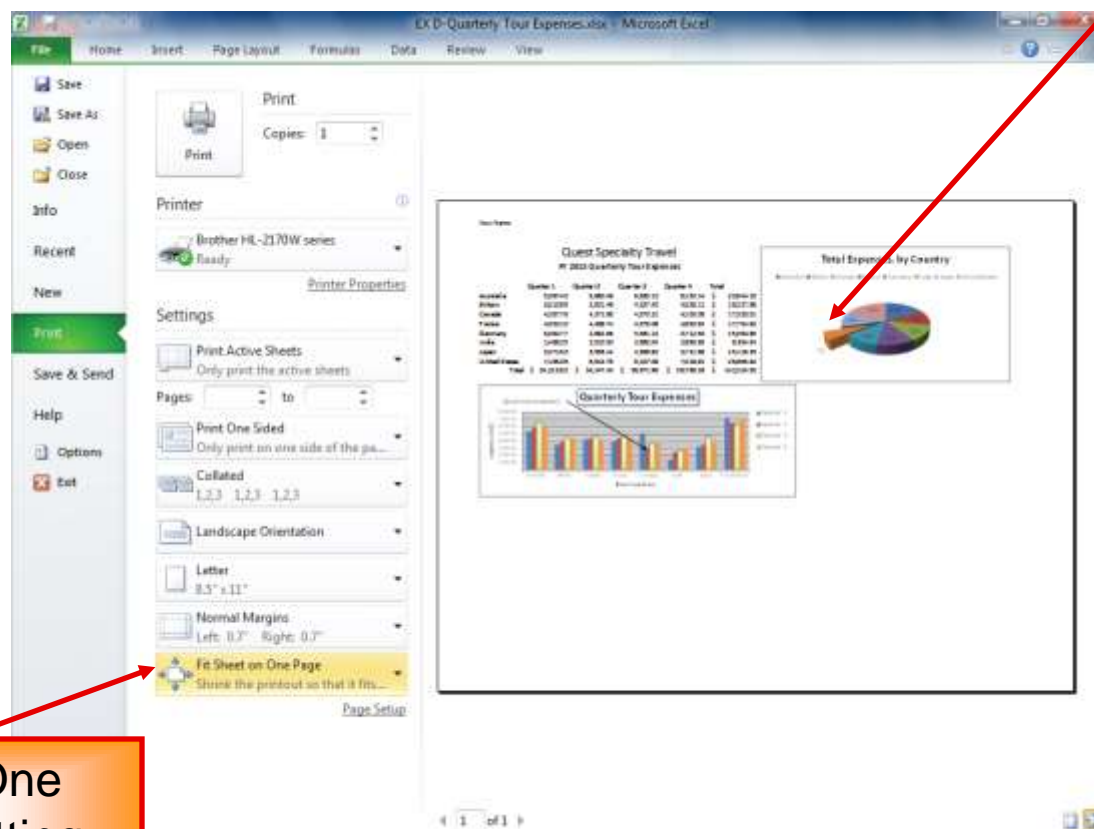
Create a Pie Chart

- Backstage view can be used to preview, change settings and print
- In **landscape** orientation, the text runs the long way on the page

Create a Pie Chart

Preview in Backstage view

Exploded
pie slice



Fit on One
Page setting

Summary

- Plan a chart
- Create a chart
- Move and resize a chart
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Summary

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